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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,767	07/28/2003	David A. Ferrera	MICRU-65125	5783
24201	7590	05/18/2007		
FULWIDER PATTON LLP HOWARD HUGHES CENTER 6060 CENTER DRIVE, TENTH FLOOR LOS ANGELES, CA 90045			EXAMINER SONNETT, KATHLEEN C	
			ART UNIT 3731	PAPER NUMBER
			MAIL DATE 05/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/628,767		FERRERA ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Kathleen Sonnett		3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 148, 150-153 and 165-178 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 148, 150-153, 165 and 167-178 is/are rejected.
- 7) ☒ Claim(s) 166 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 148, 150-153, and 178** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 148 and 150-153, the at least four coil arms have a three dimensional polyhedral expanded secondary configuration. However, a polyhedron is an object with flat faces and straight edges. As seen in fig. 21, 22, and 24, only the central body of the embodiment shown in fig. 24 has a polyhedral shape. The coil arms do not have a flat face at their ends and they have curved edges since they are formed around a mandrel (fig. 23) which has frustoconically shaped arms. The only polyhedral shape shown in fig. 21, 22, and 24 is the central body of fig. 24. Claim 178 claims a hexahedral shape which also requires flat faces and straight edges.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claims 148, 153, 165, 170-173, 174-177, and 178** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 128, 136, 112, 113-116, 118-121, and 136 of copending Application No. 11/435,373. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application are merely broader.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**Claim 150** is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 128 of copending Application No. 11/435,373 in view of Brown et al. (U.S. 6,093,199). Copending Application No. 11/435,373 claims the invention substantially but fails to claim that the central body is a three-dimensional coil having a spherical, rounded, or cubical shape. However, Brown discloses that it is well known in the art to include a rounded coil or spherical shaped coil center connecting coil arms in an occlusive device (fig. 4a or 6a). These central bodies can be used to deliver medication or block blood flow into the aneurysm thereby maintaining the average pressure within the aneurysm (col. 6 ll. 45-53). Therefore, it would have been obvious to one of ordinary skill in the art to modify the device of claim 112 of copending Application No. 11/435,373 to include a rounded central coil body as made obvious by Brown in order to block blood flow into the aneurysm.

This is a provisional obviousness-type double patenting rejection.

**Claim 152** is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 128 of copending Application No.

11/435,373 in view of Phelps et al. (U.S. 5,382,259). Copending Application No. 11/435,373 claims the invention substantially but fails to claim that the coil arms comprises at least one secondary wind coil of a primary helical wind coil. However, Phelps discloses that it is well known in the art to include an arm with a primary helical wind coil having a secondary wind coil as seen in fig. 13. This configuration aids in further occluding the vessel. Therefore, it would have been obvious to one of ordinary skill in the art to modify the device of claim 112 of copending Application No. 11/435,373 to include a primary and secondary wind coil for the coil arm as made obvious by Phelps in order to increase the occlusive potential of the device.

This is a provisional obviousness-type double patenting rejection.

**Claims 167 and 168** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 112 of copending Application No. 11/435,373 in view of Phelps et al. (U.S. 5,382,259). Claim 112 of copending Application No. 11/435,373 claims the invention substantially except for the shape memory coil being a single stranded coil or a nickel titanium alloy coil. However, Phelps discloses that single stranded nickel-titanium alloy coils used for occlusive devices are well known in the art. Nitinol having the proper transition temperature allows the device to be introduced through a catheter in a linear configuration. Therefore, it would have been obvious to one of ordinary skill in the art to modify the device of claim 112 of copending Application No. 11/435,373 to include a single-stranded nickel titanium alloy coil as made obvious by Phelps in order to gain the advantage of being able to easily deliver the device in a collapsed configuration.

This is a provisional obviousness-type double patenting rejection.

**Claim 169** is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 112 of copending Application No. 11/435,373 in view of Ritchart et al. (U.S. 4,994,069). Claim 112 of copending Application No.

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11/435,373 claims the invention substantially except for the shape memory coil being a single stranded coil of shape memory polymer. However, Ritchart et al. discloses that single stranded shape-memory polymer coils used for occlusive devices are well known in the art (see claim 4). Shape memory polymers are well known in the medical art and are often chosen for biocompatibility. Therefore, it would have been obvious to one of ordinary skill in the art to modify the device of claim 112 of copending Application No. 11/435,373 to include a single-stranded shape memory polymer coil as made obvious by Ritchart et al. in order to chose a material with good biocompatibility.

This is a provisional obviousness-type double patenting rejection.

#### ***Allowable Subject Matter***

**Claim 166** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen Sonnett whose telephone number is 571-272-5576. The examiner can normally be reached on 7:30-5:00, M-F, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCS 5/8/2007

  
GLENN K. DAWSON  
PRIMARY EXAMINER